a' cont.

2. (Once Amended) The method of claim 1, wherein the average energy is calculated by repeatedly moving an energy window by a predetermined timeslice and determining an intermediate average energy within the energy window after each of said movements.

3. (Once Amended) The method of claim 1, wherein the reducing the maximum allowable current level includes reducing the maximum allowable current level to a first current level if the average energy reaches the predetermined warning level, the first current level being associated with steady state operation.

4. (Once Amended) The method of claim 1, wherein the reducing the maximum allowable current level includes reducing the maximum allowable current level to a first level below a second current level if the average energy reaches the predetermined warning level, the second current level being associated with steady state operation.

5. (Once Amended) The method of claim 1, further comprising raising the maximum allowable current level in the actuator after the maximum allowable current level has been reduced if the average energy is below the predetermined warning energy level.

6. (Once Amended) The method of claim 1, wherein the reducing includes reducing the maximum allowable current level gradually as a ramp function.

7. (Once Amended) The method of claim 6, wherein the maximum allowable current level is reduced as a function of the energy by which the predetermined warning energy level has been exceeded.

8. (Once Amended) A method as recited in claim 1, further comprising:

determining a current in the actuator, the average energy being calculated based on the current in the actuator.

A1 cont.

9. (Once Amended) The method of claim 1, wherein the calculating and the reducing are performed by a microprocessor local to the haptic feedback device.

10. (Once Amended) The method of claim 1, further comprising sensing current with a positive temperature coefficient (PTC) resettable fuse in a current path of the actuator, the fuse being configured to open so that a flow of the current is disrupted when the current increases to a fuse threshold level.

11. (Once Amended) The method of claim 1, wherein the actuator is a DC motor.

12. (Once Amended) An apparatus comprising:

a sensor configured to send a signal associated with a movement of a haptic-feedback device;

an actuator coupled to the haptic-feedback device and configured to output a haptic-feedback; and

a controller coupled to the actuator and configured to calculate an average energy in the actuator over a predetermined period of time, the controller configured to reduce the maximum allowable current level in the actuator if average energy exceeds a predetermined warning energy level.

13. (Once Amended) The apparatus of claim 12, wherein the controller is configured to calculate the average energy by repeatedly moving an energy window by a predetermined timeslice and calculating an intermediate average energy within the energy window after each of said movements.

14. (Once Amended) The apparatus of claim 12, wherein the actuator is configured to reduce the maximum allowable current level to a first current level if the average energy reaches the predetermined warning level, the first current level being associated with steady state operation.

a' cont.

15. (Once Amended) The apparatus of claim 12, wherein the actuator is configured to reduce the maximum allowable current level to a first level below a second current level if the average energy reaches the predetermined warning level, the second current level being associated with steady state operation.

16. (Once Amended) The apparatus of claim 12, wherein the controller in configured to increase the maximum allowable current level in the actuator after the maximum allowable current level has been reduced if the average energy is below the predetermined warning energy level.

17. (Once Amended) The apparatus of claim 12, wherein the controller is a microprocessor local to the haptic feedback device.

18. (Once Amended) The apparatus of claim 12, further comprising a positive temperature coefficient (PTC) resettable fuse disposed in a current path of the actuator, the fuse being configured to open such that a flow of the current is disrupted when the current increases to a fuse threshold level.

19. (Once Amended) The apparatus of claim 12, wherein the at least one actuator is at least one DC motor.

20. (Once Amended) A method, comprising:

calculating an average energy in an actuator over a predetermined period of time;

reducing a maximum allowable current level in the actuator if the average energy exceeds a predetermined warning energy level; and

increasing the maximum allowable current level in the actuator if the average energy is below the predetermined warning energy level, the maximum allowable current level is not above a current level allowed by the actuator.